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CENTRAL FAX CENTER

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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Tsuyoshi SANO, et al.

Group Art Unit: 1755

Application No. 10/717,315

Examiner: Callie E. Shosho

Filed: November 19, 2003

For: BLACK INK COMPOSITION, INK SET, RECORDING METHOD
AND RECOREDED MATTER

Attorney Docket No.: U 014901-6

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 CFR §1.132

Sir:

I, Tsuyoshi Sano, do declare and state that:

I am the first-named inventor of the inventions described and claimed in the above-identified application and am familiar with the Office Action dated December 7, 2006 issued therein.

The following comparative experimentation was conducted by me or under my supervision to address the Examiner's comments set forth in the second paragraph on page 9 of the Office Action.

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EXPERIMENTATION

Comparative Examples 3 to 5:

The procedures and evaluation made in Example 1 were carried out in the same manner, except that the formulation of the light black ink composition was changed as shown in Table 1' attached hereto.

The evaluation results are shown in Table 1'.

I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 5/Apr/2007

Tsuyoshi Sano
Tsuyoshi Sano

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Table 1'

	K1	K2	Ex. 1	Ex. 2	Ex. 3	Ex. 4	Comp. Ex. 1	Comp. Ex. 2	Comp. Ex. 3	Comp. Ex. 4	Comp. Ex. 5
Carbon black	2.5	0.8	0.2	0.12	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Pigment Blue 60	-	-	0.1	0.1	-	-	-	-	-	-	-
Water-soluble resin (dispersant)	1.3	0.4	0.1	0.1	0.15	0.1	0.1	0.1	0.1	0.1	0.1
pH-adjusted resin emulsion A (solid content: 15%)	-	2	13.3	13.3	33.5	6.7	-	-	3.3	-	-
AQ 593 (solid content: 30%)	-	6.7	9.9	9.9	-	6.7	9.9	-	3.3	-	-
AQ 513 (solid content: 33%)	-	-	-	10	-	-	-	-	10	3.0	-
Nipol Lx811 (solid content: 50%)	-	-	-	-	-	-	-	-	-	-	4.0
HS500 (a product of HAYASHIBARA SHOJI Inc.)	2	5	5	6	4	2	5	5	5	5	5
Glycerol	18	19	17	15	18	16	20	21	20	20	21
Triethanolamine	0.9	0.9	0.9	-	0.9	0.6	0.9	0.9	0.9	0.9	0.9
Tripropanolamine	-	-	-	0.5	-	-	-	-	-	-	-
1,2-Hexanediol	5	5	5	5	-	5	5	5	5	5	5
Triethylene glycol monobutyl ether	-	-	-	-	5	-	-	-	-	-	-
Sarfinol 465	-	-	-	-	1	-	-	-	-	-	-
BYK348	0.5	0.5	0.5	0.5	-	0.5	0.5	0.5	0.5	0.5	0.5
Proxel GXL	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
EDTA	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Evaluation of confirmation of GG			0.5	0.5	0.5	0.5	4.5	4.5	4.5	4.5	4.5

Nipol Lx811: Acrylic resin fine particle emulsion, manufactured by Zeon Corporation